

1212WOORD01 2004-07 02

- 17 -

**Claims**

1. Pharmacologically compatible metal salts of pyridin-2-ylmethylsulphonyl-1H-benzimidazoles with  $H^+/K^+$ -ATPase-inhibitory activity, in which at least one positive charge equivalent of the metal ion is counterbalanced by a hydroxyl ion, and hydrates thereof.

2. Pharmacologically compatible metal salts according to claim 1, in which the pyridin-2-ylmethylsulphonyl-1H-benzimidazoles with  $H^+/K^+$ -ATPase-inhibitory activity is selected from the group of pantoprazole, omeprazole, lansoprazole, rabeprazole and tenatoprazole, (R)- and (S)-pantoprazole, (R)- and (S)-omeprazole, (R)- and (S)-lansoprazole, (R)- and (S)-rabeprazole and (R)- and (S)-tenatoprazole, and hydrates thereof.

3. Pharmacologically compatible metal salts according to claim 1, characterized by the general formula 1



In which

Me is a pharmacologically acceptable two-valued metal ion,

PPI is a compound selected from pantoprazole, omeprazole, lansoprazole, rabeprazole and tenatoprazole and their enantiomers,

OH is a hydroxyl ion,

X is a positive, whole number from 1 to 3,

Y is a positive, whole number from 1 to 5 and

Z is a positive, whole number from 1 to 5,

whereby the equation  $(Y + Z) = 2X$  applies, and hydrates thereof.

4. Pharmacologically compatible metal salts according to claim 1, characterized by the general formula 1 of claim 3, in which

Me is a pharmacologically acceptable two-valued metal ion selected from magnesium, calcium and zinc,

PPI is a compound selected from pantoprazole, omeprazole, lansoprazole, rabeprazole and tenatoprazole and their enantiomers,

OH is a hydroxyl ion,

X is the number 1 or 2,

Y is a positive, whole number from 1 to 3 and

Z is a positive, whole number from 1 to 3,

whereby the equation  $(Y + Z) = 2X$  applies, and hydrates thereof.

1212WOORD01 2004-07 02

- 18 -

5. Pharmacologically compatible metal salts according to claim 1, characterized by the general formula 1 of claim 3, in which

Me is magnesium,

PPI is a compound selected from pantoprazole, (R)-pantoprazole and (S)-pantoprazole,

OH is a hydroxyl ion,

X is the number 1 or 2,

Y is the number 1 or 3 and

Z is the number 1 or 3,

whereby the equation  $(Y + Z) = 2X$  applies, and hydrates thereof.

6. Pharmacologically compatible metal salts according to claim 1, characterized by the general formula 1 of claim 3, in which

Me is magnesium,

PPI is (S)-pantoprazole,

OH is a hydroxyl ion,

X is the number 1 or 2,

Y is the number 1 or 3 and

Z is the number 1 or 3,

whereby the equation  $(Y + Z) = 2X$  applies, and hydrates thereof.

7. Pharmacologically compatible metal salt according to claim 1, which is  $\text{Mg}[\text{Pantoprazole}]\text{OH}$ , and hydrates thereof.

8. Pharmacologically compatible metal salt according to claim 1, which is  $\text{Mg}[(\text{S})\text{-Pantoprazole}]\text{OH}$ , and hydrates thereof.

9. Pharmacologically compatible metal salt according to claim 1, which is  $\text{Mg}_2[\text{Pantoprazole}]_3\text{OH}$ , and hydrates thereof.

10. Pharmacologically compatible metal salt according to claim 1, which is  $\text{Mg}_2[(\text{S})\text{-Pantoprazole}]_3\text{OH}$ , and hydrates thereof.

11. Medicament, comprising a compound according to any of claims 1 to 10 together with customary auxiliaries.

12. Use of a compound according to any of claims 1 to 10 for treating gastrointestinal disorders.